Claims

[c1] 1. A system, comprising:
a material delivery system, driving and moving material of a first width having a width of at least 50 inches along a first path; and
a processing laser, located along said first path, and producing an output beam that scans a field size of at least said first width, said output beam processing said material in a way that changes a look of said material along said first width.

[c2] 2. A system as in claim 1, wherein said material defines a width of at least 55 inches in width.

[c3] 3. A system as in claim 1, wherein said material defines a width of at least 60 inches in width.

[c4] 4. A system as in claim 1, wherein said material defines a width of at least 62 inches in width.

[c5] 5. A system as in claim 1, further comprising a plurality of guides, spaced at edges of said material at least 55 inches away from one another, and guiding said material to said laser beam.

[c6] 6. A system as in claim 5,wherein said material delivery system includes a system which indexes said material by a specified amount, and then stops said material in a location near said laser beam for a specified amount of time.

[c7] 7. A system as in claim 5, wherein said material delivery system continually moves said material.

[c8] 8. A system as in claim 1, further comprising a controller, associated with said laser beam, which controls scanning of said laser beam in a specified way to produce specified patterns on said material.

[c9] 9. A system as in claim 8, wherein said computer includes a pattern memory associated therewith, storing a specified pattern to be formed on said material.

[c10] 10. A system as in claim 1, wherein said material deliver system includes a take up roll and a supply roll which are substantially vertical with one another.

[c11] 11. A system as in claim 9, wherein said computer controls said laser beam to scan according to information in said pattern memory, to form the new patterns of a specified type, each unique pattern formed on said material Web in a way which is adjacent another unit pattern.

[c12] 12. A system as in claim 11, wherein said unique patterns include a plurality of patterns of the same type.

[c13] 13. A system as in claim 11, wherein said pattern memory stores information for a plurality of patterns of a specified type, and another plurality of patterns of another specified type.

[c14] 14. A system as in claim 11, wherein said pattern memory includes instructions for a specified distance of a first type of pattern, and then another specified distance of a second type of pattern.

[c15] 15. A system as in claim 11, wherein said material is controlled to continuously move.

[c16] 16. A system as in claim 15, wherein said computer controls said laser beam to scan in a raster fashion while the material continually moves.

[c17] 17. A system as in claim 15, wherein said computer includes a correction factor which corrects for an amount of movement which occurs while said system is scanning.

[c18] 18. A system as in claim 17, wherein said laser is caused to raster scan.

[c19] 19. A system as in claim 11, wherein said laser is caused to move by a specified amount, then stops, then moves again.

[c20] 20. A system as in claim 19, wherein said laser beam is caused to vector scan in a specified pattern while the pattern device is stopped.

[c21] 21. A system as in claim 11, wherein said computer streams software instructions in advance.

[c22] 22. A system as in claim 1, wherein said material Web moves in a horizontal

direction.

[c23] 23. A system as in claim 1, wherein said material Web moves in a vertical direction.

[c24] 24. A system as in claim 23, further comprising a vertically extending material holding device, holding the material Web according to a specified direction.

[c25] 25. A system as in claim 16 further comprising a compensation element associated with said pattern memory, operating to compensate for an amount of movement of said material while the device is scanning.

[c26] 26. A system as in claim 8, wherein said pattern has different parts that respectively represent different parts of an apparel item.

[c27] 27. A system as in claim 1, wherein said pattern simulates a random pattern.

[c28] 28. A method, comprising:
unrolling a material from a roll of material which is at least 55 inches wide;
feeding said material along a material web, having a width of at least 55 inches wide, and guiding said material into an area of a laser beam;
lasing said material, using said laser beam, to form a pattern on said material which is at least said 55 inches wide, while said material is moving.

[c29] 29. A method as in claim 28, wherein said material Web is conveyed in a horizontal direction.

[c30] 30. A method as in claim 28, wherein said material Web is conveyed in a vertical direction.

[c31] 31. A method as in claim 28, wherein said lazing comprises forming a plurality of unit patterns, each unit pattern having a specified length, and a width of the least 55 inches.

[c32] 32. A method as in claim 31, wherein each said unit pattern is substantially square.

[c33] 33. A method as in claim 31, wherein each said unit pattern is substantially

rectangular.

[c34] 34. A method as in claim 28, wherein said forming a pattern comprises forming a continuous pattern.

[c35] 35. A method as in claim 28, further comprising controlling said laser beam using a computer which is programmed with a plurality of patterns.

[c36] 36. A method as in claim 35, further comprising streaming a plurality of different software instructions representing pattern information into said laser beam in advance, and using this scanned pattern information to form said pattern on said material.

[c37] 37. A method as in claim 28, wherein said material Web is conveyed continuously along said direction, and said laser beam is used to form said pattern while said Web is being continuously conveyed.

[c38] 38. A method as in claim 37, further comprising analyzing an amount of distortion which will be caused by said material moving between a first part of a laser scanning and a second part of the laser scanning, and compensating for said distortion by changing said pattern.

[c39] 39. A method as in claim 38, wherein said laser scanning is a raster scanning, and said amount of distortion is an amount of distortion between one side of a raster scanning and another side of the raster scanning.

[c40] 40. A method as in claim 38, wherein said changing said pattern comprises distorting said pattern according to a negative of said distortion.

[c41] 41. A method as in claim 28, wherein said material Web is indexed by moving said material Web by a specified amount, and stopping said material Web after moving said specified amount.

[c42] 42. A method as in claim 41, wherein said stopping occurs for an amount of time which allows said laser beam to write a specified amount of a pattern.

[c43] 43. A method as in claim 41, wherein said forming a pattern comprises forming a plurality of the unit patterns, each of which is separate, and said stopping

occurs for an amount of time which allows said laser beam to write an entire unit pattern.

[c44] 44. A method as in claim 43, wherein at least one of said unit patterns is different then at least one other of said unit patterns.

[c45] 45. A method as in claim 44, further comprising storing information about said unit patterns, and an amount of said unit patterns, in a memory, and forming said material Web based on said information into said memory.

[c46] 46. A method as in claim 44, wherein said unit patterns also include information about a pattern being formed thereby.

[c47] 47. A method as in claim 46, wherein said pattern forms in different parts of an article of clothing which will be later assembled.

[c48] 48. A method as in claim 47, wherein said different parts include a pant leg and a pant pocket.